

CLAIMS

1. A head-tracking method in which the three-dimensional direction the head faces is detected by three axes of a yaw angle that is an angle turning around an erect axis erected on the horizontal surface of the head, and a pitch angle and a roll angle that are angles formed by said erect axis and two axes perpendicular thereto, wherein

said yaw angle is judged from the integral value of the output of a gyro sensor, and

said pitch angle and said roll angle are calculated from the output of a tilt sensor which detects the inclination of a plane that intersects the direction of said erect axis at right angles.

2. A head-tracking method according to claim 1, wherein

a period to judge the yaw angle from the output of a gyro sensor is shorter than the period to calculate the pitch angle and the roll angle from the output of said tilt sensor.

3. A head-tracking method according to claim 1, wherein

the yaw angle judged from the output of the gyro sensor is corrected using the judged pitch angle and roll angle.

4. A head-tracking device in which the three-dimensional direction the head faces is detected by three axes of a yaw

angle that is an angle turning around an erect axis erected on the horizontal surface of the head, and a pitch angle and a roll angle that are angles formed by said erect axis and two axes perpendicular thereto, comprising:

a gyro sensor for detecting said yaw angle,

a tilt sensor which detects the inclination of a plane that intersects the direction of said erect axis at right angles, and

calculation means to judge the yaw angle from the integral value of the output of said gyro sensor, and to calculate said pitch angle and said roll angle from the angular velocity output of said tilt sensor.

5. A head-tracking device according to claim 4, wherein

with respect to said calculation means, a period to judge the yaw angle from the output of said gyro sensor is shorter than that to calculate the pitch angle and the roll angle from the output of said tilt sensor.

6. A head-tracking device according to claim 4, wherein

said calculation means performs correction of the yaw angle judged from the output of said gyro sensor using the calculated pitch angle and roll angle.